UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,261	12/31/2003	Steve S.K. Chou	TRMB1405	1726

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EXAMINER
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ART UNIT	PAPER NUMBER
2176	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/750,261	CHOU, STEVE S.K.
Office Action Summary	Examiner	Art Unit	
	Henry Orr	2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *9/9/2008*.

2a) ☐ This action is **FINAL**.　　2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1,3,4,7-9 and 15* is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1,3,4,7-9,15* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a) ☐ All　b) ☐ Some * c) ☐ None of:

　　　1. ☐ Certified copies of the priority documents have been received.

　　　2. ☐ Certified copies of the priority documents have been received in Application No. _____.

　　　3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
　　　　　application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
　　Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on

9/9/2008 has been entered.

DETAILED ACTION

1.   This action is responsive to applicant's amendment dated 9/9/2008.

2.   Claims 1, 3, 4, 7-9 and 15 are pending in the case.

3.   Claims 2, 5, 6, 10-14 and 16-20 are cancelled.

4.   Claims 1, 8 and 15 are independent claims.

Applicant's Response

5.   In Applicant's response dated 9/9/2008, applicant has amended the following:

a) Claims 1, 8 and 15

Claim Rejections - 35 USC § 112

6.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly
claiming the subject matter which the applicant regards as his invention.

7.   **Claims 8 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

Claim 8:

Claim 8 recites **"entering a start point for a third line segment"** twice, then recites "said third line segment" further in the claim. Therefore, it is not clear as to which "third line segment" is being referred to by the recited "said third line segment", which renders the claim as indefinite.

Claim 9:

Dependent claim 9 is rejected for fully incorporating the deficiencies of base claim 8.

Claim Rejections - 35 USC § 103

8.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9.   **Claims 1, 3, 4, 7, 8 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over User Guide PocketCAD PRO Version 4.0 (hereinafter**

**"PocketCAD") running on a general mobile device, May 2001 of record in view of
Christensen, U.S. Patent No. 4,663,616 A.**

Claim 1:

PocketCAD teaches **a system for entry and display of blueprint data
comprising a handheld device, said handheld device further comprising:**

PocketCAD teaches **a system for entry and display of blueprint data
comprising a handheld device, said handheld device further comprising:** (see
Introduction p. 9-10)

a graphical user interface for providing line segment data entry fields, (see
Drawing Lines p. 48-54) **arc data fields comprising a start point field** (e.g. center
point field)**, an end point field** (e.g. end point field)**, and a radius field** (e.g. start point
field) (see Arc with Center tool p. 55, Arcs p.87) **and for displaying input line
segments and arc data** (see Polyline tool p. 51-53);

PocketCAD teaches a mobile device capable of having a processor and memory
adapted for accepting one at a time, storing, and editing line segment and arc data
associated with said input line segments (see System Specifications p. 10, User
Interface Features p. 10-11, Using CadExchange p. 15-17, Polyline tool p. 51-53-e.g.
adding a line one at a time to create a polyline object.). **(claim 1; i.e., a processor and
memory adapted for accepting one at a time, storing, and editing line segment
and arc data associated with said input line segments)**

Pocket CAD teaches a Object Properties Dialog window for polylines capable of
automatically updating the segmentation of a previously placed arc created by a polyline
into at least two distinct arc segment (see Polylines p. 90). **(claim 1; i.e., said editing
of said arc data further comprising an arc segmenter for automatically
segmenting a previously placed arc into at least two distinct arc segments.)**

Although, PocketCAD fails to explicitly recite the phrase "hierarchical sequence",
PocketCAD does suggest adding and storing line segments one at a time in a
hierachical sequence. Examiner submits that the PocketCAD application allows the
user to add lines one at a time in a "hierarchical sequence". For instance, a user
creating a polyline must add a line to an existing line (see Polyline tool p. 51-53). Thus,
each line that is added to the existing polyline object is done so in a "hierarchical
sequence". Examiner submits that the storing of the line objects may be determined by
the order in which the lines are added to the polyline object. Therefore, since a polyline
object can be created in a hierarchical sequence by adding lines one at a time,
PocketPad must teach or suggest storing in a hierarchical sequence one line at a time.
**(claim 1; i.e., and wherein said input line segments are stored as a hierarchical
sequence according to said accepting one at a time,)**

PocketPAD fails to expressly teach **wherein editing, insertion, or deletion of a
selected line segment, translate line segments that succeed the selected line
segment of said hierarchical sequence without translating line segments that
precede the selected line segment in said hierarchical sequence.**

However, Christensen teaches assigning a "sticky attribute" to a line segment so that when that line segment is moved; the lines that are attached to the "sticky" line segment will also move (see abstract, col. 1 lines 58-66). In other words, Christensen teaches the capability to edit a "sticky" line segment that will translate the succeeding line segment of a hierarchical sequence without translating line segments that precede the selected "sticky" line segment in said hierarchical sequence because the "sticky attribute" can be assigned to one end of a line segment (e.g. the end attached to the succeeding lines) (see col. 6 lines 1-14). Therefore, closing a gap (i.e., editing) involving "sticky" line segment would automatically translate the attached succeeding lines. **(claim 1; i.e., and wherein editing, insertion, or deletion of a selected line segment, translate line segments that succeed the selected line segment of said hierarchical sequence without translating line segments that precede the selected line segment in said hierarchical sequence.)**

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the editing capabilities for line segments as taught by PocketPAD to include a "sticky attribute" for line segments as taught by Christensen to provide the benefit of avoiding repetitious editing and revision procedures (see Christensen; col. 1 lines 18-24).

Claim 2: (cancelled)

Claim 3:

PocketPAD teaches **wherein said line segment data entry fields comprise a**

start point field, a direction field, and a length field (e.g. distance field) (see Drawing

Lines p. 48-51).

Claim 4:

PocketPAD teaches **said display is a touch-screen** (see Place, Move, and Lift

p. 19).

Claim 5-6: (cancelled)

Claim 7:

PocketPAD teaches **further comprising a keypad** (see Setting the Keyboard or

Pen p. 22).

Claim 8:

PocketPAD teaches **a method for entering blueprint data into a handheld device**

comprising: entering a start point for a first line segment;

entering a length for said first line segment;

entering a direction for said first line segment;

entering a start point for an arc;

entering a radius for said arc;

entering a displaying said line segment and said arc on a display associated with

said handheld device; (see Introduction p. 9-10, Drawing Lines p. 48-54, Arc with

Center tool p. 55, Arcs p.87, Polyline tool p. 51-53)

PocketCAD teaches a Object Properties Dialog window for polylines capable of

automatically updating the segmentation of a previously placed arc created by a polyline

into at least two distinct arc segment (see Polylines p. 90). **(claim 8; i.e., providing a**

segment editor to automatically parse said arc into a plurality of arc

subdivisions;)

PocketCAD teaches creating a polyline with multiple line segments (see Polyline

tool p. 51-53)**. (claim 8; i.e., entering a start point for a second line segment,**

wherein said start point of said second line segment is an end point of said first

line segment; entering and displaying said second line segment on said display;

entering a start point for a third line segment, wherein said start point of said

third line segment is an end point of said first line segment;)

PocketCAD teaches moving (i.e., translating) entities such as line segments (see

p. Moving entities pgs. 76-77). **(claim 8; i.e., translating said second line segment so**

that the start point of said second line segment coincides with an end point of

said third line segment;)

PocketCAD teaches creating a polyline with multiple line segments (see Polyline

tool p. 51-53).**(claim 8;i.e., entering a start point for a third line segment, wherein**

said start point of said line segment is an end point of said second line segment;)

As explained in claim 1, PocketCAD fails to explicitly recite the phrase "hierarchical sequence"; however, PocketCAD does suggest adding and storing line segments one at a time in a hierachical sequence. Therefore, Examiner relies on the rationale set forth in claim 1 regarding this limitation. **(claim 8;i.e., storing said first, second, and third line segments as a hierarchical sequence)**

PocketPAD fails to expressly teach wherein editing, or deletion of said second line segment automatically translates said third line segment without translating said first line segment.

However, Christensen teaches wherein editing a "sticky" line segment automatically translates a succeeding attached line segments without translating a preceding line segment (see col. 6 lines 1-14). **(claim 8; i.e., and wherein editing, or deletion of said second line segment automatically translates said third line segment without translating said first line segment.)**

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the editing capabilities for line segments as taught by PocketPAD to include a "sticky attribute" for line segments as taught by Christensen to provide the benefit of avoiding repetitious editing and revision procedures (see Christensen; col. 1 lines 18-24).

Claims 10-14: (cancelled)

Claim 15:

Claim 15 includes a program embodied on a computer readable medium to implement the steps that are substantially encompassed in system claim 1; therefore the claim is rejected under the same rationale as system claim 1 above.

Claims 16-20: (cancelled)

10.   Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over by PocketPAD in view of Christensen as cited above, in further view of Minakata, U.S. Patent No. 5,568,565 B1.

Claim 9:

Both PocketPAD and Christensen failed to expressly teach a repeat factor.

However, Minakata teaches *"Repetition factor Rf is a parameter which shows whether the user intends to repeatedly write line segments"* (see col. 5 lines 26-27).

(claim 9; i.e., further comprising entering a repeat factor for said line segment.) Examiner interprets the repetition factor as equivalent to the repeat factor because the both the repetition factor and repeat factor indicate how many times the line segments should be repeated.

It would have been obvious to one of ordinary skill in the art at the time the invention to modify polyline interface as taught by PocketPAD in view of Christensen to

include a repetition factor as taught by Minakata to provide benefit of allowing the user

to repeatedly, yet efficiently write line segments (see Minakata; col. 5 lines 26-31).

Claim Rejections - 35 USC § 102

11.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –

> (a) the invention was known or used by others in this country, or patented or described in a printed
> publication in this or a foreign country, before the invention thereof by the applicant for a patent.

12.   Claim 15 is rejected under 35 U.S.C. 102(a) as being anticipated by

Microsoft Word 2003 (hereinafter "MS Word") running on a general computer

system (see attached Figures 1-3).

Claim 15:

        MS Word's Figure 1 illustrates receiving one line segment.

        MS Word's Figure 2 illustrates a plurality of line segments received one at a time.

Since the line segments may be added to the document in a hierarchical sequence,

Examiner submits that the general computer is capable of storing the line segment in

the order of the "hierarchical sequence" (e.g. add then save, add then save).

        MS Word Figure 3 illustrates deletion of a line segment, automatically translates

the succeeding lines without translating line segments preceding said selected

segment.

(claim 15; i.e., a computer-readable medium comprising computer executable instructions stored therein for performing a method of processing a plurality of line segments received one at a time and stored in a hierarchical sequence, said method comprising: in response to editing, insertion, or deletion of a selected line segment of a plurality of line segments received one at a time and stored in a hierarchical sequence according to said being received one at a time, translating line segments succeeding said selected line segment without translating line segments preceding said selected line segment.)

Response to Arguments

13.   Applicant's arguments with respect to claims 1, 3, 4, 7-9 and 15 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Henry Orr whose telephone number is (571) 270 1308. The examiner can normally be reached on Monday thru Friday 8 to 4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Hutton can be reached on (571) 272-4137. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

11/8/2008
HO

/Rachna S Desai/
Primary Examiner, Art Unit 2176